REMARKS

The previously submitted claims are canceled, but much of the subject matter is reintroduced in the newly submitted set of claims, with the independent claims modified to better define the invention. For purposes of these remarks, the rejections of the previous claims are coupled to the claims that were before the Examiner and are addressed, particularly as the rejections related to the amended set of claims.

Independent claim 39

Claim 39 is an amended version of claim 24 (though broader than claim 24), and claim 24 was rejected under 35 USC 103 as being unpatentable over Zendle et al, US Patent 6,628,627 in view of Mahany et al, US Patent 5,949,776. Applicants respectfully traverse.

A. As to the Zendle et al reference, the Examiner asserts the following:

(1) the remote site is tower 412;

(2) the broadband interface unit is element 505 that is coupled to antenna 418 (in FIG. 4, or antenna 518 in FIG. 5);

(3) the local area interface unit is element 507;

(4) the wireless local area network is element 512;

(5) the modulator is modem 506; and

(6) the user device is the peripheral devices 434 or 512.

B. The Examiner states that Zendle et al fail to explicitly disclose that the user device is adapted to communicate the site via LAN and the integrator, or via other than the local area network.

C. To supply the limitation that Zendle et al fail to disclose, the Examiner cites the Mahany et al reference which, according to the Examiner, teaches

> a communications network comprising a first wireless network and a second wireless network independently operable from the first wireless network; an access point device operable on the first wireless network as may be applied to (control LAN with the computer interface taking the form of a standard I/O interface like PCMCIA for use in WLAN); a first wireless device selectively communicating with the access point device on the first wireless network; a second wireless device operable on the second wireless network to communicate with the first wireless device.

Applicants respectfully submit that the Examiner's correspondence (4) is not valid. It is not valid even on its face, since the Examiner himself asserts that element 512 is a peripheral device in correspondence (6), and it is simply not possible for a peripheral device to be a "network," – of the "local" are variety, or any other variety. The correspondence (4) is also not valid since there is absolutely no teaching as to what element 512 is, other than what can be gleaned from the box titled "other services" in FIG. 5, which box appears to be connected in a hard-wired manner to the "distribution controller." There is simply no mention of element 512 in the Zendle et al text. Therefore, even if the Mahany et al were to teach that which the Examiner asserts, it remains that the correspondence (4) asserted by the Examiner would not be valid.

In contradistinction, claim 39 specifies:

> a local area interface unit for interacting with a wireless local area network within said building in accord with a second transmission and reception schema and protocol, where said first transmission and reception schema and protocol is different from said second transmission and reception schema and protocol.

As indicated above, Zendle et al do not have a local area network, do not have a wireless local area network, and do not convert signals from a first wireless transmission and reception schema and protocol to a second wireless transmission and reception schema and protocol. Therefore, claim 39 and the claims that depend thereon are believed to be patentable over Zendle et al in view of Mahany et al.

Independent claim 43

Claim 43 is an amended version of claim 24, and claim 24 was rejected under 35 USC 103 as being unpatentable over Zendle et al, US Patent 6,628,627 in view of Mahany et al, US Patent 5,949,776. Substantially all of the comments presented in connection with claim 39 are applicable to claim 43.

Independent claim 58

Claim 58 is an amended version of claim 20, and claim 20 was rejected under 35 USC 102 as being anticipated by Hansley et al, US Patent 5,898,730. Therefore, claim 58 is evaluated herein against the teachings of Hansley et al.

Without any admission as to the correctness of the outstanding rejection, it is respectfully submitted that applying the rejection of claim 20 to claim 58 would be inappropriate.

The Examiner asserts that Hansley et al teach a method for determining signal quality of a communication channel in a communication system and a method of integrating fixed wireless broadband access and a wireless local area network. Applicants respectfully disagree with this assertion. FIG. 1 of Hansley shows the classic arrangement of cells, each with a base station, that are adapted to communicate with roaming devices (107 and 108). The teachings of Hansley are directed to the question of signal quality over different time slots of a communication system that employs a single physical channel.

The Examiner does not identify which the Examiner considers to be the *"fixed wireless access,"* and which the Examiner considers to be the "wireless local area" radio network, but certainly Hansley does not describe two different communication fabrics; so there can be no correspondence. Furthermore, the local area network is described to be within a building, and the wireless fabric of Hansley et al is clearly outside any building. Therefore, Hansley et al clearly do not have a wireless local area network as specified in claim 58. Consequently, hence claim 58 is not anticipated by Hansley et al.

Additionally, claim 58 specifies the steps of receiving a signal, converting the protocol – where the conversion involves modulating and demodulating -- and transmitting the converted signal via the wireless local area network.

While it is possible to assert that Hansley et al have a fixed wireless access in that the base antenna (e.g., 101) is fixed and is associated with some building (albeit it is not shown, but typically exists), it would be unreasonable to assert that the base antenna is a **broadband** wireless access, since there is no teaching to that effect. Additionally, it is not possible to assert that any conversion of signal is described by Hansley et al, since no conversions are described.

Even if one were to argue that a base station in a cellular system typically converts the received signals in order to forward those signals elsewhere, it is not possible to assert that the forwarding of such converted signals is to a **local area**

network, and it is not possible to assert that the forwarding of such signals is to a **wireless** local area network.

Moreover, as already mentioned, claim 58 specifies that the wireless local area network is "within said building." No forwarding signals is done by Hansley et al, or by anyone who operates a cellular network, to a local area network within the building with which the base antenna is associated. Therefore, it is even more strongly believed that claim 58 is neither anticipated nor rendered obvious by Hansley et al.

Additionally still, claim 58 specifies that the step of transmitting is conditional. Transmission actually takes place only when the user device is *both* found within the local area network AND is conditioned to receive such signals. Referring more particularly to the actual language of the claim, when the user device is found in the local area but is not conditioned to receive such signals the method **refrains from transmitting.** This limitation constitutes yet another reason to hold that claim 58 is neither anticipated nor rendered obvious by Hansley et al.

Based on the above, it is respectfully submitted that there are numerous limitations to claim 58 that each constitutes a reason to hold the claim 58 patentable and, therefore, it is believed that claim 58 and all claims that depend thereon are patentable over the Hansley et al reference.

Independent claim 63

Claim 63 is an amended version of claim 20 and, therefore, claim 63 is evaluated herein against the teachings of Hansley et al. It is respectfully submitted that claim 63 includes a number of limitations that are neither found nor suggested by Hansley et al. Claim 63 specifies:

- A first step of determining a signal strength and channel interference. Additionally, this step specifies that the channel for which the determination is made is one that

  > includes a local area network within a building and a broadband wireless channel that couples said local area network to said source via a fixed broadband wireless access means;

  As indicated above, this step is not found in, or suggested by, Hansley et al

- A second step of determining a signal strength and channel interference. Additionally, this step specifies that the channel for which the determination is made is one that is "distinct from said first channel." The distinctiveness is such, according to the language of the claim, that

  > said user device employs a first protocol when communicating via said first channel and employs a second protocol that is different from said first protocol when communicating via said second channel

  No such step is described in, or suggested by, Hansley et al.

- A step of causing said user device to communicate over said second channel when a determination as to which channel has highest quality is in the affirmative, and to communicate over said first channel when said determination is in the negative. Hansley et al, in contradistinction, teach determining which channel has lowest quality and, endeavors to determine when a handoff to a completely different channel (e.g., to another cell site) is appropriate. Also, since Hansely et al do not describe or suggest the "first channel" of claim 63, it is not possible for them to direct the user device to employ this "first channel."

Hence, it is respectfully submitted that claim 63 is neither anticipated nor rendered obvious by Hansley et al.

Claim 64 depends on claim 63 and is, therefore, believed to be patentable over the Hansley et al reference at least by virtue of this dependence.

It is noted that claim 63 is similar to rejected claim 21, where the Examiner asserts that col. 7, lines 1-36 of Hansley et al teach "the step of interrogating an electronic device to pass information...." Applicants respectfully disagree with this assertion. The cited passage describes FIGS. 2 and 3 flowcharts of Hansley et al. Neither the FIGS. nor the text have the words "interrogate" or "pass information," and the concept of some entity sending a signal to the user device *asking* for information is simply not there. Applicants respectfully submit, therefore, that claim 64 is neither anticipated nor obvious in view of Hansley et al.

Independent claim 36 was rejected under 35 USC 103 as being unpatentable over Zendle et al, US Patent 6,628,627 in view of Mahany et al, US Patent 5,949,776, and so were the claims that depend on claim 36 (claims 16, 17, 37 and 38).

Without any admission as to the correctness of rejecting these claims, it is respectfully submitted that applying the rejection of claim 36 to independent claims 58 and 63 would be inappropriate.

The Examiner asserts the following correspondences:

As to the Zendle reference --

(7) the remote site is tower 412;

(8) the broadband interface unit is element 505 that is coupled to antenna 418 (in FIG. 4, or antenna 518 in FIG. 5);

(9) the local area interface unit is element 507;

(10) the wireless local area network is element 512;

(11) the modulator is modem 506; and

(12) the user device is the peripheral devices 434 or 512.

The Examiner states that Zendle fails to explicitly disclose that the user device is adapted to communicate the site via LAN and the integrator, or via other than the local area network. To supply this limitation the Examiner cites the Mahany et al reference which, according to the Examiner, teaches –

(13) a communications network comprising a first wireless network and a second wireless network independently operable from the first wireless network; an access point device operable on the first wireless network as may be applied to; a first wireless device selectively communicating with the access point device on the first wireless network, a second wireless device operable on the second wireless network to communicate with the first wireless device.

Applicants respectfully submit that the Examiner's correspondence (4) is not valid. It is not valid even on its face, since the Examiner himself asserts that element 512 is a peripheral device in correspondence (6), and it is simply not possible for a peripheral device to be a "network," – of the "local" are variety, or any other variety. The correspondence (4) is also not valid since there is absolutely no teaching as to what element 512 is, other than what can be gleaned from the box titled "other services" in FIG. 5, which box appears to be connected in a hard-wired manner to the "distribution controller." There is simply no mention of element 512 in the Zendle et al text. Therefore, even if the Mahany et al were to teach that which the Examiner asserts, it

remains that the correspondence (4) asserted by the Examiner would not be valid. Therefore, claim 36 and the claims that depend thereon are believed to be patentable over Zendle et al in view of Mahany et al.

Turning attention to claim 39,

Claim 39 is an independent apparatus (system) claim. So is claim 43. In the above identified Office Action, the independent apparatus (system) claim 24 was rejected under 35 USC 103 as being unpatentable over Zendle et al, US Patent 6,628,627 in view of Mahany et al, US Patent 5,949,776.

Without any admission as to the correctness of rejecting these claims, it is respectfully submitted that applying the rejection of claim 36 to independent claims 39 and 63 would be inappropriate.

In light of the above remarks, it is respectfully submitted that the new set of claims is clearly patentable over the references cited in this case and, therefore, favorable consideration of the claims is respectfully solicited.

Respectfully,
Byoung-Jo J. Kim
John Jerome Skinner

Dated: 6/27/04

By _____
Henry T. Brendzel
Reg. No. 26,844
Phone (973) 467-2025
Fax (973) 467-6589
email brendzel@comcast.net